

**RISK MANAGEMENT FRAMEWORK FOR
FOREIGN FUNDED WATER PROJECTS:
CLIENT'S PERSPECTIVE**

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Degree of Master of Science in Project Management

Department of Building Economics

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DECLARATION

I declare that this is my own work and this dissertation does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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Date:

The above candidate has carried out research for the Masters Dissertation under my supervision.

Signature of the supervisor:

Date:

*To my beloved parents
with love...*

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ABSTRACT

Risk Management Framework for Foreign Funded Water Projects: Client's Perspective

Foreign funded projects operate under a special mechanism with the complex web of the different stakeholders. It faces different types of risk related to time and cost. Thus, it is important to control and manage the risk associated with foreign funded projects to ensure the achievement of project objectives on time. Therefore, this study focuses on risk analysis of water projects which a type of foreign funded projects in Sri Lanka. Accordingly, the aim of this study was to develop risk management framework for foreign funded water projects from client's perspective. In total, 49 risk factors were identified through a detailed literature review. The factors were tabulated in a questionnaire form and sent out to gather owner's perception on the rating of each risk factors regarding probability of occurrence and impact on foreign funded projects. A risk matrix having four risk levels as "low risk – (green)", "moderate risk – (yellow)", "high risk – (orange)" and "extreme high risk- (red)" is developed to evaluate significant risk factors. The analysis indicates that one factor is located in the green zone, twelve factors are located in the yellow zone, twenty two factors are located in the orange zone and thirteen factors are located in the red zone of the risk matrix. The predominant risk factors that are located in the red zone are considered for developing risk management framework. Risk response measures were identified through a literature review and respondent were asked to rank according to its effectiveness. Further effective risk response measures have also been proposed by the respondents for each of the identified risk factor. Based on the findings, a risk management framework was developed which will be benefit the risk management of foreign funded water projects.

Keywords: *foreign funded water projects, risk, risk identification, risk matrix, risk response measure.*

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LIST OF ABBREVIATIONS

ADB	-	Asian Development Bank
DAC	-	Development Assistance Committee
DANIDA	-	Danish International Development Agency
FF	-	Foreign Funded
FIDIC	-	International Federation of Consulting Engineers
GOSL	-	Government of Sri Lanka
ICTAD	-	Institute of Construction Training and Development
ID	-	International Development
JICA	-	Japan International Cooperation Agency
NWS&DB	-	National Water Supply and Drainage Board
OA	-	Official Assistance
ODA	-	Official Development Assistance
OECD	-	Organization for Economic Co-operation and Development
RII	-	Relative Importance Index
SPSS	-	Statistical package for social science
VH	-	Very High
VL	-	Very Low